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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/743,849	03/08/2001	Masao Komai	KOMAI-4	8746

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EXAMINER	
AHMED, SHEEBA	
ART UNIT	**PAPER NUMBER**
1773	

DATE MAILED: 02/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No.	Applicant(s)	
	09/743,849	KOMAI ET AL.	
	Examiner	Art Unit	
	Sheeba Ahmed	1773	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 December 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *9-21,24 and 25* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *9-21, 24, and 25* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. Amendments to claims 9 and 10 have been entered in the above-identified application. New claims 24 and 25 have been added. **Claims 9-21, 24, and 25 are now pending**.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 24 and 25 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. New claims 24 and 25 recite that the galvanized alloy plating is not subsequently treated with chromate and thus recite a negative limitation. Any negative limitation or exclusionary proviso must have basis in the original disclosure. The mere absence of a positive recitation is not basis for an exclusion. In this case, the Specification on Page 7, lines 16-23 states the chromate treated layer may be formed however is not preferred. Hence, the original disclosure does not provide support for the above-recited negative limitation.

All new matter must be cancelled in response to this Office Action.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 9-21, 24, and 25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The language of independent claims 9 and 10 is still ambiguous. For example, Claim 9, lines 6 states that "wherein the composition of the acid solution is a galvanized alloy plating bath contains ion such that wherein hydrate oxides...". The above recitation is unclear.

Claim Rejections - 35 USC § 102

4. Claims 9-12 and 15-17 and are rejected under 35 U.S.C. 102(b) as being anticipated by Saitou et al. (US 5,032,236).

Saitou et al. disclose a process for producing a surface blackened steel sheet ***(corresponding to the resin coated steel sheet of the claimed invention)*** wherein a galvanized (i.e., Zn plated) steel sheet may be used to blacken the surface (Column 1, lines 7-10 and 42-52). The process entails using a plated steel sheet as a cathode in an acidic solution containing zinc ion, and at least one of iron, cobalt, or nickel ion amongst the other ions listed in Column 2, lines 57-68 ***(corresponding to the treatment in acid solution as recited in claims 9 and 10 and hence forming the corresponding***

hydrate oxide), and subsequently applying a chromate treatment, if required, and coating with a guard coat (Column 3, lines 1-5). The guard coat includes a resin film or a composite resin film. The resin film may be an olefin acrylic resin, urethane epoxy resin, acrylic ester resin, or a urethane resin ***(corresponding to the organic resin layer of the claimed invention and meeting the limitations of claim 11 and 12)*** (Column 7, lines 62-69). The composite polymer film may contain silica, TEFLON powder (which is polytetrafluoroethylene powder), ***(corresponding to the colloidal silica and lubricating agent of claim 10 and thus meeting the limitations of claim 15)*** and a silane coupling agent ***(thus meeting the limitations of claims 16 and 17)*** (Column 8, lines 14-16). Tables 1-3 show that the L-value in each case is less than 30 ***(thus meeting the limitation that the blackened galvanized alloy steel sheet has an L-value of equal to less than 30)***. The disclosed coated steel sheet has a distinguished appearance, improved workability and corrosion and scratch resistance and provides cost reduction during production (Column 3, lines 33-40). The determination of patentability for product claims containing process limitations is based on the product itself and not on the method of production. If the product is the same or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985) and also see MPEP 2113. In this case, the product (i.e., the resin coated steel sheet) is the same despite the process limitations of using an anodic treatment to coat the galvanized alloy layer. All limitations of claims 9-12 and 15-17 are disclosed in the above reference.

Claim Rejections - 35 USC § 103

5. Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saitou et al. (US 5,032,236) in view of Smith et al. (US 6,136,941).

Saitou et al. disclose a process for producing a surface blackened steel sheet ***(corresponding to the resin coated steel sheet of the claimed invention)*** wherein a galvanized (i.e., Zn plated) steel sheet may be used to blacken the surface using cathodic electrolysis (Column 1, lines 7-10 and 42-52). The process entails using a plated steel sheet as a cathode in an acidic solution containing zinc ion, and at least one of iron, cobalt, or nickel ion amongst the other ions listed in Column 2, lines 57-68 and subsequently applying a chromate treatment, if required, and coating with a guard coat (Column 3, lines 1-5). The guard coat includes a resin film or a composite resin film. The resin film may be an olefin acrylic resin, urethane epoxy resin, acrylic ester resin, or a urethane resin (Column 7, lines 62-69). The composite polymer film may contain silica, TEFLON powder (which is polytetrafluoroethylene powder) (Column 8, lines 14-16). Tables 1-3 show that the L-value in each case is less than 30.

Saitou et al. do not specifically disclose that their urethane resin has the claimed pencil hardness, tensile strength or extension ratio, i.e., elongation.

However, Smith et al. disclose an aqueous polyurethane dispersion having a higher modulus and that may be used to coat cold rolled steel plates and having the an elongation of 290%, a tensile strength of 5800 psi, and a pencil hardness of 1H (See

Tables 1-7) ***(thus meeting the pencil hardness, tensile strength and extension ratio limitations of claims 13 and 14).***

Accordingly, it would have been obvious to one having ordinary skill in the art to use a urethane resin having the claimed pencil hardness, tensile strength and extension ratio, i.e., elongation, in a resin coated steel sheet given that Smith et al. teach that such a resin has a higher modulus and is desirable in coating steel sheets.

6. Claims 18-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ishizaka et al. (US 4,550,991) in view of Saitou et al. (US 5,032,236).

Ishizaka et al. teach that film cartridges are made of steel so that when a film cartridge is loaded into a film chamber it is attracted by the permanent magnets (Column 3, lines 51-55).

Ishizaka et al. do not teach that the steel film cartridge has the claimed galvanized alloy plating, blackened surface or a resin coating.

However, Saitou et al. disclose a process for producing a surface blackened steel sheet wherein a galvanized (i.e., Zn plated) steel sheet may be used to blacken the surface using cathodic electrolysis (Column 1, lines 7-10 and 42-52). The process entails using a plated steel sheet as a cathode in an acidic solution containing zinc ion, and at least one of iron, cobalt, or nickel ion amongst the other ions listed in Column 2, lines 57-68, and subsequently applying a chromate treatment, if required, and coating with a guard coat (Column 3, lines 1-5). The guard coat includes a resin film or a composite resin film. The resin film may be an olefin acrylic resin, urethane epoxy resin,

acrylic ester resin, or a urethane resin (Column 7, lines 62-69). The composite polymer film may contain silica, TEFLON powder (which is polytetrafluoroethylene powder) (Column 8, lines 14-16). Tables 1-3 show that the L-value in each case is less than 30. The disclosed coated steel sheet has a distinguished appearance, improved workability and corrosion and scratch resistance and provides cost reduction during production (Column 3, lines 33-40).

Accordingly, it would have been obvious to one having ordinary skill in the art to replace the steel sheet used to make film cartridge taught by Ishizaka et al. with the steel sheet disclosed by Saitou given that Saitou et al. specifically teach that their steel sheet has a distinguished appearance, improved workability and corrosion and scratch resistance and provides cost reduction during production.

Response to Arguments

7. Applicants traverse the rejection of claims 9-12 and 15-17 under 35 U.S.C. 102(b) as being anticipated by Saitou et al. (US 5,032,236), the rejection of claims 13 and 14 under 35 U.S.C. 103(a) as being unpatentable over Saitou et al. (US 5,032,236) in view of Smith et al. (US 6,136,941) and the rejection of claims 18-21 under 35 U.S.C. 103(a) as being unpatentable over Ishizaka et al. (US 4,550,991) in view of Saitou et al. (US 5,032,236) and submit that the surface of the galvanized alloy steel sheet is blackened by anodic electrolysis and that the galvanized alloy steel sheet of Saitou et al. is blackened by cathodic electrolysis and that this difference in process forms a different blackened substance on the steel sheet. The Applicants direct the

Examiner's attention to the last full paragraph of the Specification of the instant application, which states that the resulting blackened surface is a hydrate oxide Zn, Co, Ni, or Mo.

However, the last full paragraph on Page 6 of the instant application states that the a surface of the steel sheet becomes dark by "forming a layer of the composite" which "mainly includes at least one kind of hydrate oxide selected from a group of Zn, Co, Ni, and Mo". It is unclear what is meant by the above recitation. Furthermore, the Applicants have failed to show that the difference in process results in a blackened layer having a different composition given that the composition of the plating bath in each instance is the same.

Hence the above rejections are maintained.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sheeba Ahmed whose telephone number is (571)272-1504. The examiner can normally be reached on Mondays and Thursdays from 9:30am to 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol Chaney can be reached on (571)272-1284. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sheeba Ahmed
Art Unit 1773
February 21, 2006